

NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES

CHAPTER Env-A 300 AMBIENT AIR QUALITY STANDARDS

Statutory Authority: RSA 125-C:4, I(b)

PART Env-A 301 PURPOSE, SCOPE AND DEFINITIONS

Env-A 301.01 Purpose. The purpose of this chapter is to establish ambient air quality standards for various types of pollutants emitted in or transported into the State of New Hampshire pursuant to section 109 of the Clean Air Act (Act), 40 CFR 53, and 40 CFR 50, as amended. These standards are intended to be protective of the public health and public welfare in accordance with RSA 125-C:1.

Source. #120, eff 8-31-73; ss by #461, eff 4-20-74; ss by #1333, eff 4-1-79; ss by #1614, eff 7-30-80; ss by #1717, eff 2-19-81; ss by #2332, eff 4-29-83; ss by #2938, eff 12-27-84; ss by #5033, eff 12-27-90; ss by #6227, eff 4-25-96; ss by #8054, eff 2-28-04

Env-A 301.02 Scope. This chapter shall apply statewide to ambient levels of air.

Source. #6227, eff 4-25-96; ss by #8054, eff 2-28-04

Env-A 301.03 References. For the purpose of this chapter, unless otherwise specified, the July 1, 2003 edition of title 40 of the Code of Federal Regulations (CFR) shall control all references to 40 CFR 50 and 40 CFR 53.

Source. #6227, eff 4-25-96; ss by #8054, eff 2-28-04

Env-A 301.04 Definitions. For the purposes of this chapter, the following definitions shall apply:

(a) “Attainment” means the meeting or satisfaction of a primary or secondary ambient air quality standard;

(b) “Equivalent method” means “equivalent method” as defined by 40 CFR §50.1(g), namely “a method of sampling and analyzing the ambient air for an air pollutant that has been designated as an equivalent method in accordance with part 53 of this chapter [chapter I]; it does not include a method for which an equivalent method designation has been cancelled in accordance with §53.11 or §53.16 of this chapter [chapter I]”;

(c) “Primary ambient air quality standard” means the level of air quality designated by the administrator of the EPA which is judged as necessary to protect the public health. For purposes of this definition, “public health” means the overall health and safety of the general human population at large;

(d) “Reference method” means “reference method” as defined by 40 CFR §50.1(f), namely “a method of sampling and analyzing the ambient air for an air pollutant that is specified as a reference method in an appendix to this part [part 50], or a method that has been designated as a reference method in accordance with part 53 of this chapter [chapter I]; it does not include a method for which a reference method designation has been cancelled in accordance with §53.11 or §53.16 of this chapter [chapter I]”; and

(e) “Secondary ambient air quality standard” means the level of air quality designated by the administrator of EPA which is judged as necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant. For purposes of this definition, “public welfare” means the well-being of animals and vegetation and the maintenance of property.

Source. #8054, eff 2-28-04

PART Env-A 302 SOURCE OF THE STANDARDS

Env-A 302.01 New Hampshire Standards.

(a) The department shall designate the primary and secondary ambient air quality standards in this chapter to be at least as stringent as the federal primary and secondary ambient air quality standards, respectively.

(b) The department shall not construe the adoption of these standards in any manner to allow the significant deterioration of existing air quality in any portion of the state.

Source. #120, eff 8-31-73; ss by #461, eff 4-20-74; ss by #1333, eff 4-1-79; ss by #1614, eff 7-30-80; ss by #1717, eff 2-19-81; ss by #2332, eff 4-29-83; ss by #2938, eff 12-27-84; ss by #5033, eff 12-27-90; ss by #6227, eff 4-25-96; ss by #8054, eff 2-28-04

PART Env-A 303 PRIMARY AND SECONDARY AMBIENT AIR QUALITY STANDARDS FOR PARTICULATE MATTER

Env-A 303.01 Primary and Secondary Ambient Air Quality Standards for Particulate Matter. The department shall designate 4 primary ambient air quality standards and 4 secondary ambient air quality standards for particulate matter as follows:

(a) For particulate matter measured in the ambient air as particles 10 micrometers in diameter or smaller (PM_{10}):

(1) The annual primary and secondary ambient air quality standards shall be 50 micrograms per cubic meter (ug/m^3), annual arithmetic mean concentration; and

(2) The 24-hour primary and secondary ambient air quality standards shall be $150 ug/m^3$, 24-hour average concentration; and

(b) For particulate matter measured in the ambient air as particles 2.5 micrometers in diameter or smaller ($PM_{2.5}$):

(1) The annual primary and secondary ambient air quality standards shall be $15 ug/m^3$, annual arithmetic mean concentration; and

(2) The 24-hour primary and secondary ambient air quality standards shall be $65 ug/m^3$, 24-hour average concentration.

Source. #120, eff 8-31-73; ss by #461, eff 4-20-74; ss by #1333, eff 4-1-79; ss by #1614, eff 7-30-80; ss by #1717, eff 2-19-81; ss by #2332, eff 4-29-83; ss by #2938, eff 12-27-84; ss by #4601, eff 4-21-89; ss by #5033, eff 12-27-90; ss by #6227, eff 4-25-96; ss by #8054, eff 2-28-04

Env-A 303.02 Determination of Attainment of Primary and Secondary Standards for Particulate Matter. The department shall determine the attainment of primary and secondary standards for particulate matter as follows:

(a) For particulate matter measured in the ambient air as PM_{10} :

NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES

- (1) The annual primary and secondary ambient air quality standards shall be deemed to be attained when the expected annual arithmetic mean concentration is less than or equal to 50 ug/m^3 , as determined in accordance with appendix N of 40 CFR 50; and
 - (2) The 24-hour primary and secondary ambient air quality standards shall be deemed to be attained when the 99th percentile 24-hour concentration is less than or equal to 150 ug/m^3 , as determined in accordance with appendix N of 40 CFR 50.
- (b) For particulate matter measured in the ambient air as $\text{PM}_{2.5}$:
- (1) The annual primary and secondary ambient air quality standards shall be deemed to be attained when the expected annual arithmetic mean concentration is less than or equal to 15 ug/m^3 , as determined in accordance with appendix N of 40 CFR 50; and
 - (2) The 24-hour primary and secondary ambient air quality standards shall be deemed to be attained when the 98th percentile 24-hour concentration is less than or equal to 65 ug/m^3 , as determined in accordance with appendix N of 40 CFR 50.

Source. #120, eff 8-31-73; ss by #461, eff 4-20-74; ss by #1333, eff 4-1-79; amd by #1614, eff 7-30-80; ss by #1717, eff 2-19-81; ss by #2332, eff 4-29-83; ss by #2938, eff 12-27-84; ss by #5033, eff 12-27-90; ss by #6227, eff 4-25-96; ss by #8054, eff 2-28-04

Env-A 303.03 Measurement of Particulate Matter in Ambient Air to Determine Attainment of Standards.
For the purpose of determining attainment of the primary and secondary ambient air quality standards, particulate matter shall be measured in the ambient air:

- (a) For PM_{10} , by either:
- (1) A reference method based on appendix M of 40 CFR 50 and designated in accordance with 40 CFR 53; or
 - (2) An equivalent method designated in accordance with 40 CFR 53; and
- (b) For $\text{PM}_{2.5}$, by either:
- (1) A reference method based on appendix L of 40 CFR 50 and designated in accordance with 40 CFR 53; or
 - (2) An equivalent method designated in accordance with 40 CFR 53.

Source. #120, eff 8-31-73; ss by #461, eff 4-20-74; ss by #1333, eff 4-1-79; ss by #1614, eff 7-30-80; ss by #1717, eff 2-19-81; ss by #2332, eff 4-29-83; ss by #2938, eff 12-27-84; ss by #5033, eff 12-27-90; ss by #6227, eff 4-25-96; ss by #8054, eff 2-28-04

PART Env-A 304 PRIMARY AND SECONDARY AMBIENT AIR QUALITY STANDARDS FOR SULFUR DIOXIDE

Env-A 304.01 Primary and Secondary Ambient Air Quality Standards for Sulfur Dioxide, CAS 7446-09-5. The department shall designate 2 primary ambient air quality standards and one secondary ambient air quality standard for sulfur dioxide as follows:

NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES

(a) The annual primary ambient air quality standard shall be 0.030 parts per million (ppm) or 80 ug/m³, annual arithmetic mean concentration.

(b) The 24-hour primary ambient air quality standard shall be 0.14 ppm or 365 ug/m³, 24-hour average concentration.

(c) The secondary ambient air quality standard shall be 0.5 ppm or 1300 ug/m³, 3-hour average concentration.

Source. #120, eff 8-31-73; ss by #721.3, eff 12-7-75; ss by #1717, eff 2-19-81; ss by #2332, eff 4-29-83; ss by #2938, eff 12-27-84; ss by #5033, eff 12-27-90; ss by #6227, eff 4-25-96; ss by #8054, eff 2-28-04

Env-A 304.02 Determination of Attainment of Primary and Secondary Standards for Sulfur Dioxide. The department shall determine the attainment of primary and secondary standards for sulfur dioxide as follows:

(a) The annual primary ambient air quality standard shall be deemed to be attained when it is not exceeded in a calendar year.

(b) The 24-hour primary ambient air quality standard shall be deemed to be attained when it is exceeded not more than once per calendar year.

(c) The secondary ambient air quality standard shall be deemed to be attained when it is exceeded not more than once per calendar year.

Source. #120, eff 8-31-73; ss by #721.3, eff 12-7-75; ss by #1717, eff 2-19-81; ss by #2332, eff 4-29-83; ss by #2938, eff 12-27-84; ss by #5033, eff 12-27-90; ss by #6227, eff 4-25-96; ss by #8054, eff 2-28-04

Env-A 304.03 Measurement of Sulfur Dioxide in Ambient Air to Determine Attainment of Standards. For the purpose of determining attainment of the primary and secondary ambient air quality standards, sulfur dioxide shall be measured in the ambient air by either:

(a) The reference method described in appendix A of 40 CFR 50; or

(b) An equivalent method designated in accordance with 40 CFR 53.

Source. #120, eff 8-31-73; ss by #721.3, eff 12-7-75; ss by #1717, eff 2-19-81; ss by #2332, eff 4-29-83; ss by #2938, eff 12-27-84; ss by #5033, eff 12-27-90; ss by #6227, eff 4-25-96; ss by #8054, eff 2-28-04

PART Env-A 305 PRIMARY AMBIENT AIR QUALITY STANDARDS FOR CARBON MONOXIDE

Env-A 305.01 Primary Ambient Air Quality Standards for Carbon Monoxide, CAS 630-08-0. The department shall designate 2 primary ambient air quality standards and no secondary ambient air quality standard for carbon monoxide as follows:

(a) The 8-hour primary ambient air quality standard shall be 9 ppm or 10 milligrams per cubic meter (mg/m³), 8-hour average concentration.

NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES

(b) The 1-hour primary ambient air quality standard shall be 35 ppm or 40 mg/m³, 1-hour average concentration.

Source. #6227, eff 4-25-96; ss by #8054, eff 2-28-04

Env-A 305.02 Determination of Attainment of Primary Standards for Carbon Monoxide. The department shall determine the attainment of primary standards for carbon monoxide as follows:

(a) The 8-hour primary ambient air quality standard shall be deemed to be attained when it is exceeded not more than once per calendar year.

(b) The 1-hour primary ambient air quality standard shall be deemed to be attained when it is exceeded not more than once per calendar year.

Source. #6227, eff 4-25-96; ss by #8054, eff 2-28-04

Env-A 305.03 Measurement of Carbon Monoxide in Ambient Air to Determine Attainment of Standards. For the purpose of determining attainment of the primary ambient air quality standards, carbon monoxide shall be measured in the ambient air by either:

(a) A reference method based on appendix C of 40 CFR 50 and designated in accordance with 40 CFR 53; or

(b) An equivalent method designated in accordance with 40 CFR 53.

Source. #6227, eff 4-25-96; ss by #8054, eff 2-28-04

PART Env-A 306 PRIMARY AND SECONDARY AMBIENT AIR QUALITY STANDARDS FOR NITROGEN DIOXIDE

Env-A 306.01 Primary and Secondary Ambient Air Quality Standards for Nitrogen Dioxide, CAS 10102-44-0. The department shall designate one primary ambient air quality standard and one secondary ambient air quality standard for nitrogen dioxide as follows:

(a) The annual primary ambient air quality standard shall be 0.053 ppm or 100 ug/m³, annual arithmetic mean concentration.

(b) The secondary ambient air quality standard shall be the same as that designated in (a), above.

Source. #6227, eff 4-25-96; ss by #8054, eff 2-28-04

Env-A 306.02 Measurement of Nitrogen Dioxide in Ambient Air to Determine Attainment of Standards. For the purpose of determining attainment of the primary and secondary ambient air quality standards, nitrogen dioxide shall be measured in the ambient air by either:

(a) A reference method based on appendix F of 40 CFR 50 and designated in accordance with 40 CFR 53; or

(b) An equivalent method designated in accordance with 40 CFR 53.

Source. #6227, eff 4-25-96; ss by #8054, eff 2-28-04

PART Env-A 307 PRIMARY AND SECONDARY AMBIENT AIR QUALITY STANDARDS FOR OZONE

Env-A 307.01 Primary and Secondary Ambient Air Quality Standards for Ozone, CAS 10028-15-6. The department shall designate 2 primary ambient air quality standards and 2 secondary ambient air quality standards for ozone as follows:

(a) The primary ambient air quality standards shall be:

- (1) For 1-hour average concentration, 0.12 ppm or 235 ug/m³; and
- (2) For daily maximum 8-hour average, 0.08 ppm; and

(b) The secondary ambient air quality standards shall be the same as designated in (a), above.

Source. #6227, eff 4-25-96; ss by #8054, eff 2-28-04

Env-A 307.02 Determination of Attainment of Primary and Secondary Standards for Ozone. The department shall determine the attainment of the primary and secondary standards for ozone as follows:

(a) For the 1-hour standard, when the expected number of days per calendar year above the standard is equal to or less than one, as determined by appendix H of 40 CFR 50; and

(b) For the 8-hour standard, when the average of the annual fourth-highest daily maximum 8-hour average ozone concentration is less than or equal to 0.08 ppm, as determined in accordance with appendix I of 40 CFR 50.

Source. #6227, eff 4-25-96; ss by #8054, eff 2-28-04

Env-A 307.03 Measurement of Ozone in Ambient Air to Determine Attainment of Standards. For the purpose of determining attainment of the primary and secondary ambient air quality standards, ozone shall be measured in the ambient air by a reference method based on appendix D of 40 CFR 50 and designated in accordance with 40 CFR 53.

Source. #6227, eff 4-25-96; ss by #8054, eff 2-28-04

PART Env-A 308 PRIMARY AND SECONDARY AMBIENT AIR QUALITY STANDARDS FOR LEAD

Env-A 308.01 Primary and Secondary Ambient Air Quality Standards for Lead, CAS 7439-92-1. The department shall designate one primary ambient air quality standard and one secondary ambient air quality standard for lead as follows:

(a) The primary ambient air quality standard shall be 1.5 ug/m³, 3-month arithmetic mean concentration.

(b) The secondary ambient air quality standard shall be the same as that designated in (a), above.

Source. #6227, eff 4-25-96; ss by #8054, eff 2-28-04

Env-A 308.02 Measurement of Lead in Ambient Air to Determine Attainment of Standards. For the purpose of determining attainment of the primary and secondary ambient air quality standards, lead shall be measured in the ambient air by either:

(a) A reference method based on appendix G of 40 CFR 50; or

(b) An equivalent method designated in accordance with 40 CFR 53.

Source. #6227, eff 4-25-96; ss by #8054, eff 2-28-04

APPENDIX

Provision of the Proposed Rule	Specific State or Federal Statutes or Regulations which the Rule is Intended to Implement
Env-A 301	RSA 125-C:4, I(b); 42 U.S.C. §7409; 40 CFR 53; 40 CFR 50
Env-A 302	RSA 125-C:4, I(b); 40 CFR §50.1
Env-A 303	RSA 125-C:4, I(b); 42 U.S.C. §7409; 40 CFR 53; 40 CFR §§50.6 and 50.7; 40 CFR 50, Appendix L, M, and N
Env-A 304	RSA 125-C:4, I(b); 42 U.S.C. §7409; 40 CFR 53; 40 CFR §§50.4 and 50.5; 40 CFR 50, Appendix A
Env-A 305	RSA 125-C:4, I(b); 42 U.S.C. §7409; 40 CFR 53; 40 CFR §50.8; 40 CFR 50, Appendix C
Env-A 306	RSA 125-C:4, I(b); 42 U.S.C. §7409; 40 CFR 53; 40 CFR §50.11; 40 CFR 50, Appendix F
Env-A 307	RSA 125-C:4, I(b); 42 U.S.C. §7409; 40 CFR 53; 40 CFR §§50.9 and 50.10; 40 CFR 50, Appendix H and I
Env-A 308	RSA 125-C:4, I(b); 42 U.S.C. §7409; 40 CFR 53; 40 CFR §50.12; 40 CFR 50, Appendix G